SSD (formerly FFD) SATA 2.5 "

Reliable, High - Capacity SATA Drive

The SanDisk SSD SATA 2.5" (formerly FFD 2.5" Serial ATA) is a state - of - the - art solid - state flash disk, based on NAND flash technology, that provides the functionality of a hard disk with no moving parts. SSD SATA 2.5 " is an ideal, reliable storage solution for mission - critical applications that must operate under harsh environmental conditions, as well as for the telecommunication and blade server industry that must support 99.999% availability.

SSD SATA 2.5 " delivers outstanding reliability and enhanced endurance thanks to SanDisk TrueFFS technology, which applies dynamic wear - leveling and bad block management. Due to its unique design, SSD SATA 2.5 " provides high - performance sustained read and write rates up to 150Mbytes/sec and supports Serial ATA 1.0a standard.

SSD SATA 2.5 " is fully compatible with the SATA 1.0a interface, and has the same mechanical dimensions and mounting holes of traditional mechanical disks. It is a true drop - in replacement for rotating 2.5" Serial ATA (SATA) and Serial Attached SCSI (SAS) disks with highest reliability and operating mean time between failure (MTBF) hours.

Specifications

Capacity
Unformatted (Gbytes): 1, 2, 4, 8, 12, 16, 24, 32, 40, 48, 56, 64, 72, 80, 88, 96, 104, 112, 120, 128

Compatibility
Serial ATA: High - speed serialized AT attachment, revision1.0a, Serial ATA working group

Performance
Burst Read/Write: 150 Mbytes/sec (1.5 Gbits/sec)
Sustained Read: 44 Mbytes/sec
Sustained Write: 40 Mbytes/sec
Access time: <0.04 ms

Physical
Form factor: 2.5"
Case dimensions (mm): 100.2(L) X 69.85(W) X 9.5 to 22.5(H)
Weight: 0.1 Kg for 16GB; 0.22 Kg for 128GB

Environmental
Operating temperature
Commercial: 0°C to +70°C
Enhanced: - 25°C to +75°C
Extended: - 40°C to +85°C
Storage temperature: - 55°C to +95°C
Humidity: 5% to 95% relative, non - condensing
Operating altitude: Up to 80,000 feet
Operating shock: 1,500G, MIL - STD - 810F
Operating vibration:16.3G RMS (random, 10Hz to 2000Hz; 3 vibration axes),
MIL - STD - 810F

Reliability

MTBF	1,180,777 operating hours MTBF for 16GB based on Telcordia SR - 332, GB, 25°C
EDC/ECC	Embedded EDC/ECC, based on BCH algorithm
BER (Bit Error Rate)	$<10^{-20}$

Reliability features
Built - in power - up self - test (BIT)
Manual and automatic self - diagnostics
TrueFFS bad block management
Data integrity under power - cycling
S.M.A.R.T (Self - Monitoring, Analysis and Reporting Technology) remote monitoring

Endurance
Unlimited read cycles
TrueFFS dynamic wear - leveling
Garbage collection process

Enhanced Security Erase
Entire disk security erase in seconds
Partial security erase
Auto - resume security erase/sanitize on power interrupt
Sanitize complies with NISPOM DoD 5220.22 - M, NSA 130 - 2, Air Force AFSSI 5020, Army 380 - 19, Navy NAVSO P - 5239 - 26 and IREC (IRIG) 106 NTISSP - 9
Secure erase/sanitize software interrupt, hardware interrupt optional

RoHS Compliant

Warranty
5 years

Ordering Information
SDSTH - CCCG - 000000
SD: Prefix: SanDisk
S: SATA interface
T: Operating Temperature Range
Blank - Commercial: 0°C to +70°C
N - Enhanced: - 25°C to +75°C
X - Extended: - 40°C to +85°C
H: Case Height
A - 9.5mm up to 16GB
B - 14.5mm up to 64GB
C - 18.5 mm up to 112GB
D - 22.5 mm up to 128GB
CCC: Unformatted Capacity (Gbytes): 001,002, 004, 008, 012, 016, 024, 032, 040, 048, 056, 064, 072, 080, 088, 096, 104, 112, 120, 128
G: Gbytes

Note: 1 megabyte (MB) = 1 million bytes; 1 gigabyte (GB) = 1 billion bytes. Some of the listed capacity is used for formatting and other functions, and thus is not available for data storage.
Read more.

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